



UNITED STATES PATENT AND TRADEMARK OFFICE

mv
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,402	06/12/2002	Thierry Marnay	P06794US00/MP	1151

881 7590 03/01/2004

STITES & HARBISON PLLC
1199 NORTH FAIRFAX STREET
SUITE 900
ALEXANDRIA, VA 22314

EXAMINER

MILLER, CHERYL L

ART UNIT	PAPER NUMBER
----------	--------------

3738

17

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,402

Applicant(s)

MARNAY ET AL.

Examiner

Cheryl Miller

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/19/01, 3/26/02, 8/19/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-29, 31-34, 37-65 is/are rejected.
- 7) ☒ Claim(s) 10,30,35 and 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/March 26, 2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: The disclosure does not contain the proper headings (see below).

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 8, 11-17, 19-22, 24-25, and 43-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the two ends" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the lateral edges" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitations "the pivot insert" and "the correspondingly spherically shaped receptacle" in lines 1 and 2 respectively. There is insufficient antecedent basis for these limitations in the claim. A pivot insert has not yet been positively claimed, only mentioned as functional language in the claims from which it depends. Claims 12 and 17 depend upon claim 11 and inherit all problems associated with the claim.

Claim 12 recites the limitations "the spherical receptacle" and "the central protrusion" in lines 1 and 2 respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim 13 recites the limitation "the central indentation" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claims 14-16 depend upon claim 13 and inherit all problems associated with the claim.

Claim 14 recites the limitations "the pivot insert" and "the side" in lines 1 and 2 respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim 15 recites the limitation "the pivot insert" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the pivot insert" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitations "the pivot insert" and "the central receptacle" and "its" in lines 1, 2, and 2 respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim 19 recites the limitation "its" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claims 20-22 and 24 depend upon claim 19 and inherit all problems associated with the claim.

Claim 20 recites the limitation "the bottom part" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 recites the limitation "said engagement means" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 43 recites the limitation "the insert" in line 8. There is insufficient antecedent basis for this limitation in the claim. Claims 44-48 depend upon claim 43 and inherit all problems associated with the claim.

Claim 47 recites the limitation "the side thereof" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 27-28 and 49-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Marnay (FR-2718635, cited by applicant in IDS). Referring to claim 27, Marnay discloses an intervertebral implant comprising an upper part (1) having an upper surface (12) for engaging a vertebrae (C1) and a curved insert receiving bottom surface (4) formed in a downwardly extending protrusion (4 protrudes downward from the upper surface 12), a lower part (2) having a lower surface (13) for engaging a vertebrae (C2) and a generally flat insert receiving upper surface formed as a recess (2a), an insert (3) having a curved upper surface (15) for allowing relative movement of the upper (1) and lower (2) parts and located between and engaging the curved bottom surface (4) of the upper part (1) and the generally flat upper surface (2a) of the lower part (2), the recess in the lower part being defined by raised oppose side walls (9) and including an opening (fig. 7, 8) along one end between the opposed side walls (9) and the insert (3) being insertable onto the upper surface (2a) of the lower part (2) laterally through the opening (fig. 11), wherein at least one of the upper part (1) and lower part (2) have at the end where the opening is, engagement means (6, 8) for engaging an instrument. Referring to claim 28, Marnay discloses engagement means comprising instrument receiving apertures (6, 8).

Art Unit: 3738

Referring to claim 49, Marnay discloses an intervertebral implant comprising an upper part (1) having an upper surface (12) for engaging a vertebrae (C1) and a lower surface (4) for engaging an insert (3), a lower part (2) having a lower surface (13) for engaging a vertebrae (C2) and an upper surface (2a) for securing an insert, an insert (3) located between the upper (1) and lower (2) parts, at least one of the upper part and lower part having engaging means (6, 8) for engaging instruments, the upper part and lower part each having a lead end (end without bracket), a trail end (end with bracket) opposite the lead end, and the engaging means (6, 8) located only on the trail end (fig.2, 8) of the at least one upper and lower part such that insertion instruments may be located only in a working space between parallel lines defined by opposed sides of the implant and the lower part (2) having an opening (seen in fig.7, 8) located within the working space for allowing insertion movement of the insert (3) into the space between the upper and lower parts. Referring to claims 50-51, Marnay discloses engaging means (6, 8) comprising apertures in the trailing end of the upper and lower parts (fig.3, 9).

Claims 33-34, 37-38, and 49-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Marnay (USPN 5,314,477, cited by applicant in IDS). See figures 1-3 and col.4 line 63-col.5 lines 23. Referring to claim 33, Marnay discloses an intervertebral implant (100) comprising an upper part (120) having an upper surface for engaging a vertebrae (410, fig.1) and having a lower surface having a downwardly extending protrusion which is adapted to receive the top of an insert (fig.1), a lower part (120) having a lower surface for engaging a vertebrae (400; fig.1) and an upper surface formed as a recess (122) and adapted to receive the bottom of an insert (22), and wherein the protrusion (concave portion) of the upper part (110) is nestable in the recess

Art Unit: 3738

(122) of the lower part (120). Referring to claims 34, 37, and 38, see figures 1-3, engagement means (115, 116, 125, 126), insert (20) with convex top (21).

Referring to claim 49, Marnay discloses an intervertebral implant (100) comprising an upper part (11) having an upper surface for engaging a vertebrae and a lower surface for engaging an insert (20), a lower part (120) having a lower surface for engaging a vertebrae and an upper surface for securing an insert (20), an insert (20) located between the upper and lower parts (fig. 1), at least one of the upper and lower part having engaging means (115, 116, 125, 126), the upper and lower part each having a lead end and a trailing end opposite the lead end, and the engaging means (115, 116, 125, 126) being located only on the trailing end (fig. 1, 2) such that insertion instruments may be located only in a working space between parallel lines defined by opposed sides of the implant and the lower part (120) having an opening (recess 122) located within the working space (between sides of implant) for allowing insertion movement of the insert (20) into the space between the upper and lower parts (when upper and lower parts are separated by a height, insert 20 may be placed in opening 122, located within the working space, between the sides of the implant). Referring to claims 50-52, Marnay discloses engaging means (115, 116, 125, 126) comprising apertures in the trail end of both parts (fig. 1), the parts being generally rectangular in plan view (fig. 2)

Claims 1-9 and 49-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Kojimoto et al. (USPN 5,290,312, cited by applicant in IDS). Referring to claim 1, Kojimoto discloses an intervertebral implant (10) having an upper part (20) having a support face (34) for a vertebra and a lower part (18) having a support face (22) for an adjacent vertebra, engagement

Art Unit: 3738

elements (82, 84, 90, 92) on each part, accessible from the side of the implant, the upper and lower part each having protrusions (walls 48, 52, 40, 42, 44, 28, 30, 32) and recesses (24, 36) aimed at the other part offset laterally from one another, such that they mesh together (fig.3) the engagement elements (82, 84, 90, 92) on the upper and lower parts disposed in protrusions (48, 52) of the parts and located side by side and at least partly overlap in the direction of the height of the implant (fig.3, 4).

Referring to claims 2-9, Kojimoto discloses engagement elements (82, 84, 90, 92) being insertion openings extending parallel to the support faces (fig.3, 4) and on the protrusions of the parts, the lower part having a central indentation surrounded by a U shaped edge (fig.2, 3).

Referring to claim 49, Kojimoto discloses an intervertebral implant (10) comprising an upper part (20) having an upper surface (34) for engaging a vertebrae and a lower surface (opposite surface of 34) for engaging an insert (bone material, col.8, lines 33-42), a lower part (18) having a lower surface (22) for engaging a vertebrae and an upper surface (surface opposite 22) for securing an insert, an insert (bone material, col.8, lines 33-42) located between the upper and lower parts, at least one of the upper or lower part having engaging means (82, 84, 90, 92), the upper and lower part each having a lead end and a trailing end opposite the lead end, and the engaging means located only on the trailing end (fig.2-4), the lower part (18) having an opening (46) located with the working space for allowing insertion movement of the insert (bone material) into the space between the upper and lower parts.

Referring to claims 50-52, Kojimoto discloses the engaging means (82, 84, 90, 92) comprising apertures in the trail end of both parts and the parts generally rectangular in plan view (fig.2-4).

Claims 18-20, 26-29, 31-34, 37-38, 49-50, and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyd et al. (USPN 5,425,773, cited by applicant in IDS). Referring to claim 18, Boyd discloses an intervertebral implant (110, 410) comprising an upper part (top part of fig.6, 7, 13, 14) having an upper surface for engaging a vertebrae and a lower surface (136, 436) having a rounded concave portion (126, 426), a lower part (bottom tray part, fig.6, 7, 13, 14, 18-20) having a lower surface (76) for engaging a vertebrae and an upper surface (72) comprising a pair of opposed side walls (174) and an opening (fig.18, 19; col.9, lines 6-20) along one end of the upper surface between the side walls (174), an insert (344, or others seen in fig.6, 7, 13, and 14) having a bottom portion which is shaped to enter the opening (fig.18-20) and securely engage the side walls (174) and a raised portion (convex, 146, 446) which is smaller in area horizontally, than the bottom portion (156, 456) which projects upwardly from the bottom portion to a convex top which mates with the concave portion of the upper part (fig.6, 7, 13, 14, 18-20).

Referring to claims 19-20 and 26, Boyd discloses engagements means (80) on the lower part, the upper part having a downward protrusion including the concave portion (126, 426), the protrusion in the absence of the insert, being nestable between the opposed side walls of the bottom part (fig.6, 7, 13, and 14 will have a shorter height in the absence of an insert 126, 146, 344) the total height of both parts less without the insert, the upper and lower parts being generally rectangular in plan view (fig.5, 12, 18).

Referring to claim 27, Boyd discloses an intervertebral implant (110, 410) comprising the above and further, an insert (344, or others shown in fig.6, 7, 13, 14) having a curved upper

Art Unit: 3738

surface (146, 446) for allowing relative movement of the upper and lower parts and located between and engaging a curved bottom surface (126, 426) of the upper part and a generally flat upper surface (172) of the lower part (170) formed as a recess, the recess in the lower part being defined by raised opposed side walls (174) and including an opening (front opening) along one end between the side walls (174) and the insert (344) insertable onto the upper surface (172) of the lower part (170) laterally through the opening (fig.18-20; col.9, lines 7-20), wherein at least one of the parts having engagement means (80) on the end where the opening is located (fig.20).

Referring to claims 28-29 and 31-32, see above paragraphs and fig.6, 7, 13, 14, and 18-20.

Referring to claim 33, Boyd discloses an intervertebral implant (110, 410) comprising an upper part (top part of fig.6, 7, 13, 14) having an upper surface for engaging a vertebrae and having a lower surface having a downwardly extending protrusion (136, 436) adapted to receive a top of an insert, a lower part (170; bottom part of fig.6, 7, 13, 14) having a lower surface (176) for engaging a vertebrae and an upper surface (172) formed as a recess and adapted to receive the bottom of an insert, and wherein the protrusion of the upper part is nestable in the recess of the lower part for initial insertion of the two parts together into the intervertebral space (fig.6, 7, 13, 14).

Referring to claims 34, 37, and 38, Boyd discloses engagement means (80) and an insert (344, or others shown in fig.6, 7, 13, 14) having a convex spherical top portion (146, 446) engagable with a concave bottom surface (126, 426) of the upper part.

Referring to claims 49-50 and 52, Boyd discloses an intervertebral implant (110, 410) comprising an upper part (top part of fig.6, 7, 13, 14, 20) having an upper surface for engaging a

Art Unit: 3738

vertebrae and a lower surface (126, 426) for engaging an insert, a lower part (170; bottom part of fig.6, 7, 13, 14, 18-20) having a lower surface (176) for engaging a vertebrae and an upper surface (172) for securing an insert, an insert (344, or others in fig.6, 7, 13, 14) located between the upper and lower parts, at least one of the upper and lower part having engaging means (80) for an instrument, the upper and lower parts each having a lead end (460) and a trailing end (458) opposite the lead end, and engaging means (80) located only on the trail end (fig.20), a working space between parallel lines defined by opposed sides of the implant and the lower part having an opening located within the working space for allowing insertion movement of the insert into the space between the upper and lower parts (fig.18-20). Boyd discloses the upper and lower parts generally rectangular in plan view (fig.12, 18).

Claims 18-20, 23, 25-29, 31-34, 37-38, 43-47, 49-50, 52, and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Wagner et al. (USPN 6,641,614 B1). See figures 25-32C and respective portions of the specification. Wagner discloses an intervertebral implant (200) comprising a generally rectangular upper part (202) having an upper surface (203) for engaging a vertebrae and a curved insert receiving bottom surface (209) formed in a downwardly extending protrusion (protrudes from 240), a generally rectangular lower part (204 +206) having a lower surface (203) for engaging a vertebrae and a generally flat insert receiving surface (209) formed as a recess, an insert (bone material, 294, fig.32C; col.21, lines 24-26) having a curved upper surface (conforming to inner surfaces 209 of upper and lower parts, so will be curved, as the parts are) for allowing relative movement between the upper and lower parts, and located between and engaging the curved bottom surface (209) of the upper part (202) and the generally

Art Unit: 3738

flat upper surface (209) of the lower part (204 +206), the recess in the lower part being defined by raised side walls (212, 214), an end wall (210) and including an opening along the opposite end between the opposed side walls and the insert (bone material 294) being insertable onto the upper surface of the lower part laterally through the opening, wherein at least one of the upper and lower part have at the end thereof where the opening is located, engagement means (258, 278). Wagner discloses the engagement means (258, 278) comprising instrument receiving apertures on the trailing end of the implant (fig.28). Wagner discloses an insert (bone material 294) having a generally rectangular lower portion filling the space formed between the side walls (212, 214) of the lower part (204 +206), and a raised projection (bone conforming to inner surface of upper part 202) convex and spherical. Wagner discloses the insert receiving upper surface of the lower part including a detent recess (spherical detent in 209, see fig.27) with an edge extending across the surface generally perpendicular to the opposed side walls, the insert having a downward protrusion (bone material will conform to inner surfaces of upper and lower parts) extending across the insert parallel to the edge of the recess, which downward protrusion is resiliently engagable in the detent recess (fig.32C).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marnay (FR-2718635, cited by applicant in IDS). Marnay discloses an intervertebral implant comprising an upper part (1) having an upper surface (12) for engaging a vertebrae (C1) and a curved insert receiving bottom surface (4), a lower part (2) having a lower surface (13) for engaging a vertebrae (C2) and an insert receiving upper surface (2a), an insert (3) having a curved upper surface (15) for allowing relative movement of the upper and lower parts and located between and engaging the curved bottom surface (4) of the upper part and the insert receiving upper surface (2a) of the lower part, the insert receiving upper surface of the lower part (2a) being defined by raised opposed side walls (9), and including an opening along one end (fig.7, 8) between the opposed side walls (9) and the insert being insertable onto the upper surface of the lower part laterally through the opening (fig.11). Marnay discloses a detent recess (18) with an edge on one part, and a protrusion (11) on another part, which protrusion (11) is resiliently engagable in the recess (18), however Marnay discloses the recess (18) on the insert (3) and protrusion (11) on the lower part (2), which is opposite of what is claimed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the detent recess on the lower part and protrusion on the insert, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

Claims 39-42, 53, and 55-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marnay (USPN 5,314,477, cited by applicant in IDS). Referring to claim 39, Marnay discloses an intervertebral implant (100) comprising an upper part (110) having an upper surface

Art Unit: 3738

for engaging a vertebrae and having an insert receiving bottom surface formed in a downwardly extending protrusion, a lower part (120) having a lower surface for engaging a vertebrae and an insert receiving upper surface comprising opposed side walls which form a recess (122), wherein without the insert, the protrusion nests within the recess (fig. 1; angled protrusion engages recess 122), and engagement apertures (115, 116, 125, 126) formed in the upper part (110) and in the opposed side walls of the lower part (120), wherein in the nested condition the engagement openings (115, 116, 125, 126) of the upper and lower parts overlap in the vertical direction (the apertures in the upper part vertically overlap the apertures in the lower surface, they lie along the same vertical axis, the upper overlaps the lower apertures, vertically). Marnay discloses apertures (115, 116) in the upper part (110), however not in the protrusion of the upper part. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the upper apertures in another location, such as on the protrusions, since it has been held that a mere relocation of parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Referring to claims 40-42, Marnay discloses a shorter height of the upper and lower parts when in the nested condition (without the insert, the parts will nest to a shorter height). Marnay discloses an insert (20) having a convex spherical top (21; fig.3) engagable with a concave spherical bottom surface of the upper part.

Referring to claims 53 and 55, Marnay discloses an intervertebral implant (100) comprising an upper part (110) having an upper surface for engaging a vertebrae and a lower rounded surface for engaging an insert, a lower part (120) having a lower surface for engaging a vertebrae and an upper rounded surface for securing an insert, the upper and lower part each

Art Unit: 3738

having a lead end and a trailing end opposite the lead end and including two lateral sides (fig.2), an anchor (1110, 1210) on the upper surface of the upper part (110) and lower surface of the lower part (120) of a height sufficient to anchor the part into a groove cut into the vertebrae (fig.1, 3), the anchor having teeth (1111, 1211; fig.3) on the tops thereof. Marnay disclose two anchors instead of one (as claimed) on each part, therefore, Marnay does disclose a single anchor (one of the anchors on each part), however the single anchor is not located on a midline of the implant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a single anchor centered, which would put it at a midline, since it has been held that mere relocation of parts of an invention involves only routine skill in the art.

In re Japikse, 86 USPQ 70.

Referring to claims 56-65, see figures 1-3).

Allowable Subject Matter

Claims 11-17, 21-22, 24, and 48 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 10, 30, and 35-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Miller whose telephone number is (703) 305-2812. The examiner can normally be reached on Monday through Friday from 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 308-2111. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cheryl Miller



David H. Willse
Primary Examiner